

## NOV 0 9 2001

1646

## **TECH CENTER 1600/2900**

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/579,680

DATE: 10/29/2001 TIME: 15:31:08

Input Set : A:\BIOGEN1.APP.txt

Output Set: N:\CRF3\10292001\1579680.raw

3 <110> APPLICANT: Pepinsky, et al.

5 <120> TITLE OF INVENTION: HYDROPHOBICALLY-MODIFIED PROTEIN COMPOSITIONS AND

METHODS

8 <130> FILE REFERENCE: BIIJ-P02-067

10 <140> CURRENT APPLICATION NUMBER: 09/579,680

11 <141> CURRENT FILING DATE: 2000-05-26

13 <150> PRIOR APPLICATION NUMBER: PCT/US98/25676

14 <151> PRIOR FILING DATE: 1998-12-13

16 <160> NUMBER OF SEQ ID NOS: 4

18 <170> SOFTWARE: PatentIn Ver. 2.1

20 <210> SEQ ID NO: 1

21 <211> LENGTH: 175

22 <212> TYPE: PRT

23 <213> ORGANISM: human

25 <400> SEQUENCE: 1

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29 Leu Val Pro Leu Ala Tyr Lys Gln Phe Ser Pro Asn Val Pro Glu Lys

20 25

32 Thr Leu Gly Ala Ser Gly Arg Tyr Glu Gly Lys Ile Ala Arg Ser Ser

33 · 35

35 Glu Arg Phe Lys Glu Leu Thr Pro Asn Tyr Asn Pro Asp Ile Ile Phe

55

38 Lys Asp Glu Glu Asn Thr Gly Ala Asp Arg Leu Met Thr Gln Arg Cys

70 75

41 Lys Asp Arg Leu Asn Ser Leu Ala Ile Ser Val Met Asn Gln Trp Pro

44 Gly Val Lys Leu Arg Val Thr Glu Gly Trp Asp Glu Asp Gly His His

100 105 45

47 Ser Glu Glu Ser Leu His Tyr Glu Gly Arg Ala Val Asp Ile Thr Thr

115 120

50 Ser Asp Arg Asp Arg Asn Lys Tyr Gly Leu Leu Ala Arg Leu Ala Val

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53 Glu Ala Gly Phe Asp Trp Val Tyr Tyr Glu Ser Lys Ala His Val His

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56 Cys Ser Val Lys Ser Glu His Ser Ala Ala Lys Thr Gly Gly

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60 <210> SEQ ID NO: 2

61 <211> LENGTH: 174

62 <212> TYPE: PRT

63 <213> ORGANISM: human

65 <400> SEQUENCE: 2

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69 Thr Pro Leu Ala Tyr Lys Gln Phe Ile Pro Asn Val Ala Glu Lys Thr

20 25

72 Leu Gly Ala Ser Gly Arg Tyr Glu Gly Lys Ile Ser Arg Asn Ser Glu

**ENTERED** 

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Input Set : A:\BIOGEN1.APP.txt

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76		Ara	Phe		Glu	Leu	Thr	Pro	Asn	Tyr	Asn	Pro	Asp	Ile	Ile	Phe	Lys
79 65 70 75 80 81 Asp Lys Leu Asn Ala Leu Ala Ile Ser Val Met Asn Gln Trp Pro Gly 82 85 90 95 84 Val Lys Leu Arg Val Thr Glu Gly Trp Asp Glu Asp Gly His His Ser 85 100 105 110 87 Glu Glu Ser Leu His Tyr Glu Gly Arg Ala Val Asp Ile Thr Thr Ser 88 115 120 125 90 Asp Arg Asp Arg Ser Lys Tyr Glu Gly Met Leu Ala Arg Leu Ala Val Glu 91 130 135 140 93 Ala Gly Phe Asp Trp Val Tyr Tyr Glu Ser Lys Ala His Ile His Cys 94 145 150 150 165 100 <210 > SEQ ID NO: 3 101 <211> LENGTH: 176 102 <212> TYPE: PRT 103 <213> ORGANISM: human 105 <400 > SEQUENCE: 3 106 Cys Gly Pro Gly Arg Gly Pro Val Gly Arg Arg Arg Tyr Ala Arg Lys 107 1 5 10 15 108 Gly Arg Thr Leu Gly Ala Ser Gly Pro Ala Glu Gly Arg Val Ala Arg Gly 113 35 101 124 Arg Thr Leu Gly Ala Ser Gly Pro Ala Glu Gly Arg Val Ala Arg Gly 115 Ser Glu Arg Phe Arg Asp Leu Val Pro Asn Tyr Asn Pro Asp Ile Ile 116 50 55 60 118 Phe Lys Asp Glu Glu Asn Ser Gly Ala Asp Arg Leu Met Thr Glu Arg 119 65 75 60 118 Phe Lys Asp Glu Glu Asn Ser Gly Ala Asp Arg Leu Met Thr Glu Arg 119 65 75 60 110 15 100 15 110 101 15 100 15 110 101 100 100 15 110 101 100 100 100 100 100 100 111 Arg Thr Leu Gly Ala Ser Gly Pro Ala Glu Gly Arg Val Ala Arg Gly 113 35 140 145 140 145 140 140 140 140 140 140 140 140 140 140				-						-							-
81 ASP Lys Leu Asn Ala Leu Ala Ile Ser Val Met Asn Gln Trp Pro Gly 85 90 95  84 Val Lys Leu Arg Val Thr Glu Gly Trp Asp Glu Asp Gly His His Ser 100 105 110  87 Glu Glu Ser Leu His Tyr Glu Gly Arg Ala Val Asp Ile Thr Thr Ser 120 125  90 Asp Arg Asp Arg Ser Lys Tyr Gly Met Leu Ala Arg Leu Ala Val Glu 130 135 140  91 130 135 160  93 Ala Gly Phe Asp Trp Val Tyr Tyr Glu Ser Lys Ala His Ile His Cys 160  96 Ser Val Lys Ala Glu Asn Ser Val Ala Ala Lys Ser Gly Gly 77 165 160  96 Ser Val Lys Ala Glu Asn Ser Val Ala Ala Lys Ser Gly Gly 97 165 170  100 <210 > SEQ ID NO: 3  101 <211 > LENGTH: 176  102 <212 > TYPE: PRT  103 <213 > ORGANISM: human  105 <400 > SEQUENCE: 3  106 Cys Gly Pro Gly Arg Gly Pro Val Gly Arg Arg Arg Tyr Ala Arg Lys  107 1 5 10  109 Gln Leu Val Pro Leu Leu Tyr Lys Gln Phe Val Pro Gly Val Pro Glu 10  20 25 30  112 Arg Thr Leu Gly Ala Ser Gly Pro Ala Glu Gly Arg Val Ala Arg Gly 11  13 35 40 45  115 Ser Glu Arg Phe Arg Asp Leu Val Pro Asn Tyr Asn Pro Asp Ile Ile 16  50 55 60  118 Phe Lys Asp Glu Glu Asn Ser Gly Ala Asp Arg Leu Met Thr Glu Arg 196 5 70 75 80  121 Cys Lys Glu Arg Val Asn Ala Leu Ala Ile Ala Val Met Asn Met Trp 207 100  127 His Ala Gln Asp Ser Leu His Tyr Glu Gly Trp Asp Glu Asp Gly His 130 135 110  137 130 135 120 125  130 Thr Ser Asp Arg Asp Arg Asn Lys Tyr Glu Ser Arg Asn His Val 131 130 135 140  131 130 135 150 170 175  143 <210 > SEQ ID NO: 4  144 <211 > LENGTH: 176  144 <211 > LENGTH: 176  145 <212 > TYPE: PRT  146 <213 > ORGANISM: human	78 2	Asp	Glu	Glu	Asn	Thr	Gly	Ala	Asp	Arg	Leu	Met	Thr	Gln	Arg	Cys	Lys
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85 90 95 84 Val Lys Leu Arg Val Thr Glu Gly Trp Asp Glu Asp Gly His His Ser 100 105 110 87 Glu Glu Ser Leu His Tyr Glu Gly Arg Ala Val Asp Ile Thr Thr Ser 115 120 125 88 115 120 125 90 Asp Arg Asp Arg Ser Lys Tyr Gly Met Leu Ala Arg Leu Ala Val Glu 91 130 135 160 93 Ala Gly Phe Asp Trp Val Tyr Tyr Glu Ser Lys Ala His Ile His Cys 1415 150 155 160 96 Ser Val Lys Ala Glu Asp Ser Val Ala Ala Lys Ser Gly Gly 97 165 170 100 <210> SEQ ID NO: 3 101 <211> LENGTH: 176 102 <212> TYPE: PRT 103 <213> ORGANISM: human 105 <400> SEQUENCE: 3 106 Cys Gly Pro Gly Arg Gly Pro Val Gly Arg Arg Arg Tyr Ala Arg Lys 107 1 5 10 15 109 Gln Leu Val Pro Leu Leu Tyr Lys Gln Phe Val Pro Gly Val Pro Glu 12 120 Arg Thr Leu Gly Ala Ser Gly Pro Ala Glu Gly Arg Val Ala Arg Gly 113 35 40 45 115 Ser Glu Arg Phe Arg Asp Leu Val Pro Asn Tyr Asn Pro Asp Ile Ile 16 50 55 60 18 Phe Lys Asp Glu Glu Asn Ser Gly Ala Asp Arg Leu Met Thr Glu Arg 119 65 70 75 80 121 Cys Lys Glu Arg Val Asn Ala Leu Ala Ile Ala Val Met Asn Met Trp 122 85 90 95 124 Pro Gly Val Arg Leu Arg Val Thr Glu Gly Arg Ala Leu Asp Ile Thr 125 100 105 110 127 His Ala Gln Asp Ser Leu His Tyr Glu Gly Arg Ala Leu Asp Ile Thr 128 115 15 165 100 105 110 175 177 178 180 131 130 135 120 105 133 Val Glu Ala Gly Phe Asp Arg Asn Lys Tyr Gly Leu Leu Ala Arg Leu Ala 131 130 135 140 133 Val Glu Ala Gly Phe Asp Arg Asn Lys Tyr Gly Leu Leu Ala Arg Leu Ala 131 130 135 140 134 Val Glu Ala Gly Phe Asp Arg Asn Lys Tyr Gly Leu Leu Ala Arg Leu Ala 131 130 135 140 134 Val Glu Ala Gly Phe Asp Arg Asn Lys Tyr Gly Leu Leu Ala Arg Leu Ala 131 130 135 140 135 140 136 His Val Ser Val Lys Ala Asp Asp Asn Ser Leu Ala Val Met Asn His Val 134 145 150 150 155 160 136 His Val Ser Val Lys Ala Asp Asp Asn Ser Leu Ala Val Arg Ala Gly Gly 177 165 179 179 165 179 179 179 179 180 179 179 179 179 179 179 179 179 179 179	81 2	Asp	Lys	Leu	Asn	Ala	Leu	Ala	Ile	Ser	Val	Met	Asn	Gln	Trp	Pro	Gly
85		-	-												_		_
87 Glu Glu Ser Leu His Tyr Glu Gly Arg Ala Val Asp Ile Thr Thr Ser 88	84 1	Val	Lys	Leu	Arg	Val	Thr	Glu	Gly	Trp	Asp	Glu	Asp	Gly	His	His	Ser
88			-		_				_	_	_		-	_			
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91	88			115			_		120	_			_	125			
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94 145		-	_	-	-		_	_	_				_				
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112 Arg Thr Leu Gly Ala Ser Gly Pro Ala Glu Gly Arg Val Ala Arg Gly 113	109	Glr	Let	ı Val	Pro	Lei	ı Let	ı Tyr	. Lys	s Glı	n Phe	e Val	. Pro	Gly	Val	. Pro	Glu
113	110				20	)				2	5				30	)	
115 Ser Glu Arg Phe Arg Asp Leu Val Pro Asn Tyr Asn Pro Asp Ile Ile 116 50	112	Arg	Thi	Leu	Gly	, Ala	a Sei	c Gly	Pro	o Ala	a Glu	ı Gly	Arg	Val	Ala	Arg	g Gly.
116	113			35	5				4(	)				45	ı		
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119 65	116		50	)				55	5				60	)			
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122																	
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125	122					85	5				9	)				95	5
127 His Ala Gln Asp Ser Leu His Tyr Glu Gly Arg Ala Leu Asp Ile Thr 128	124	Pro	Gly	y Val	Arg	g Let	ı Arç	y Val	LThi	r Glı	u Gl	y Trp	) Asp	Glu	Asp	Gl3	/ His
128																	
130 Thr Ser Asp Arg Asp Arg Asn Lys Tyr Gly Leu Leu Ala Arg Leu Ala 131	127	His	Ala	ı Glr	ı Asp	Sei	r Lei	ı His	з Туз	r Gli	u Gl	y Arg	, Ala	Leu	Asp	) Ile	? Thr
131	128			115	5				120	)				125	ı		
133 Val Glu Ala Gly Phe Asp Trp Val Tyr Glu Ser Arg Asn His Val 134 145	130	Thr	: Sei	: Asp	Arg	y Asy	Arg			з Ту	r Gl	y Let			Arg	, Let	ı Ala
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RAW SEQUENCE LISTING DATE: 10/29/2001 PATENT APPLICATION: US/09/579,680 TIME: 15:31:08

Input Set : A:\BIOGEN1.APP.txt

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209 <221> NAME/KEY: SITE

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Input Set : A:\BIOGEN1.APP.txt

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- 216 <223> OTHER INFORMATION: Xaa= Pro or Ala
- 218 <220> FEATURE:
- 219 <221> NAME/KEY: SITE
- 220 <222> LOCATION: (41)
- 221 <223> OTHER INFORMATION: Xaa= Tyr or Ala
- 223 <220> FEATURE:
- 224 <221> NAME/KEY: SITE
- 225 <222> LOCATION: (45)
- 226 <223> OTHER INFORMATION: Xaa= Ile or Val
- 229 <220> FEATURE:
- 230 <221> NAME/KEY: SITE
- 231 <222> LOCATION: (46)
- 232 <223> OTHER INFORMATION: Xaa= Ala or Ser
- 234 <220> FEATURE:
- 235 <221> NAME/KEY: SITE
- 236 <222> LOCATION: (48)
- 237 <223> OTHER INFORMATION: Xaa= Ser, Asn, or Gly
- 239 <220> FEATURE:
- 240 <221> NAME/KEY: SITE
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- 242 <223> OTHER INFORMATION: Xaa= Glu or Asp
- 244 <220> FEATURE:
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- 259 <220> FEATURE:
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- 261 <222> LOCATION: (83)
- 262 <223> OTHER INFORMATION: Xaa= Asp or Glu
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- 265 <221> NAME/KEY: SITE
- 266 <222> LOCATION: (84)
- 267 <223> OTHER INFORMATION: Xaa= Arg or Lys
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- 270 <221> NAME/KEY: SITE
- 271 <222> LOCATION: (85)

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- 272 <223> OTHER INFORMATION: Xaa= Leu or Val
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- 277 <223> OTHER INFORMATION: Xaa= Ser or Ala
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- 282 <223> OTHER INFORMATION: Xaa= Gln or Met
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- 292 <221> NAME/KEY: SITE
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- 294 <223> OTHER INFORMATION: Xaa= Glu or Gln
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- 299 <223> OTHER INFORMATION: Xaa= Glu or Asp
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- 334 <223> OTHER INFORMATION: Xaa= Ser or Ala

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/579,680

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Input Set : A:\BIOGEN1.APP.txt

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L:373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:376 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:388 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:394 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
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